

OCT 29 2004

## Summary of Safety and Effectiveness

**Submitter:** Zimmer, Inc.  
P.O. Box 708  
Warsaw, IN 46581-0708

**Contact Person:** Dalene Binkley  
Associate, Regulatory Affairs  
Telephone: (574) 372-4907  
Fax: (574) 372-4605

**Date:** June 16, 2004

**Trade Name:** NexGen® Porous, HA/TCP, Uncemented Femoral and Tibial Baseplate Components

**Common Name:** Total Knee Prosthesis

**Classification Name and Reference:** Knee joint patellofemorotibial metal/polymer porous-coated uncemented prosthesis-  
21 CFR § 888.3565

**Predicate Device:** NexGen® Porous, Uncemented Femoral and Tibial Baseplate Components, manufactured by Zimmer, Inc., K031061, cleared October 9, 2003.

**Device Description:** The devices included in this 510(k), are identical to their predicates except for the addition of HA/TCP.

**Intended Use:** These devices are indicated for patients with severe knee pain and disability due to rheumatoid arthritis, osteoarthritis, traumatic arthritis, polyarthritis, collagen disorders, and/or avascular necrosis of the femoral condyle, post-traumatic loss of joint configuration, particularly when there is patellofemoral erosion, dysfunction or prior patellectomy, and moderate valgus, varus, or flexion deformities. The salvage of previously failed surgical attempts or for a knee in which satisfactory stability in flexion cannot be obtained at the time of surgery.

CR, LPS, and CR-Flex porous coated components may be used cemented or uncemented (biological fixation) while the CR and CR-Flex hydroxyapatite/tricalcium (HA/TCP) porous coated femoral or tibial baseplate components may only be used uncemented. All other femoral, tibial baseplate and all-polyethylene patella components are indicated for cemented use only.

**Comparison to Predicate Device:**

These devices are identical to their predicate devices except for the addition of HA/TCP.

**Performance Data (Nonclinical and/or Clinical):**

**Non-Clinical Performance and Conclusions:**

No additional testing was required.

**Clinical Performance and Conclusions:**

Clinical data and conclusions were not needed for this device.



OCT 29 2004

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Dalene T. Binkley  
Associate, Regulatory Affairs  
Zimmer, Inc.  
P.O. Box 708  
Warsaw, Indiana 46581-0708

Re: K041100

Trade/Device Name: NexGen® Porous, HA/TCP, Uncemented Femoral and Tibial  
Baseplate Components

Regulation Number: 21 CFR 888.3565

Regulation Name: Knee joint, patellofemorotibial, metal/polymer, porous-coated  
uncemented prosthesis

Regulatory Class: II

Product Code: MBH

Dated: October 6, 2004

Received: October 7, 2004

Dear Ms. Binkley:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

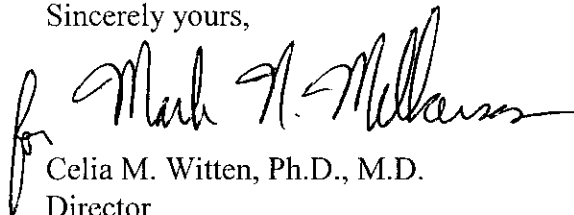
Page 2 – Ms. Dalene T. Binkley

CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", with a stylized initial "C" and "W".

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

### Indications for Use

510(k) Number (if known): K04 1100

**Device Name:**

*NexGen®* Porous, HA/TCP, Uncemented Femoral and Tibial Baseplate Components

**Indications for Use:**

These devices are indicated for patients with severe knee pain and disability due to rheumatoid arthritis, osteoarthritis, traumatic arthritis, polyarthritis, collagen disorders, and/or avascular necrosis of the femoral condyle, post-traumatic loss of joint configuration, particularly when there is patellofemoral erosion, dysfunction or prior patellectomy, and moderate valgus, varus, or flexion deformities. The salvage of previously failed surgical attempts or for a knee in which satisfactory stability in flexion cannot be obtained at the time of surgery.

CR, LPS, and CR-Flex porous coated components may be used cemented or uncemented (biological fixation) while the CR and CR-Flex hydroxyapatite/tricalcium (HA/TCP) porous coated femoral or tibial baseplate components may only be used uncemented. All other femoral, tibial baseplate and all-polyethylene patella components are indicated for cemented use only.

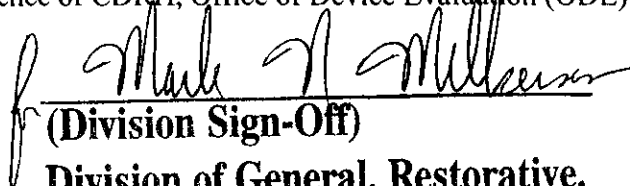
Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(Please do not write below this line – Continue on another page if needed)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of General, Restorative,  
and Neurological Devices

510(k) Number K04 1100

Page 1 of 1